

CLAIM 81

A process for protecting a human against an infection caused by at least one human papillomavirus, comprising: administering to a human a protective amount of the recombinant product of claim 79.

CLAIM 82

The recombinant product of claim 79 wherein said recombinant product comprises a recombinant human papillomavirus L1 protein.

CLAIM 83

A method for producing the recombinant product of claim 79, comprising:
expressing from a recombinant cell, a human papillomavirus L1 protein or fragment thereof that includes a conformational epitope, said conformational epitope being a conformational epitope present in an intact human papillomavirus virion, said cell including an expression system which expresses said human papillomavirus L1 protein or fragment thereof.

CLAIM 84

The method of claim 83, wherein the expression system comprises a baculovirus vector.

CLAIM 85

The method of claim 83, wherein the host cell is a mammalian cell.

CLAIM 86

The method of claim 83, wherein the host cell is a COS cell.

CLAIM 87

A method of immunodetecting infected serum, comprising immunodetecting infected

serum in a sample by use of the recombinant product of claim 79.

CLAIM 88

The method of claim 87, wherein the papillomavirus is a human papillomavirus selected from the group consisting of HPV 1, HPV 2, HPV 3a, HPV 4, HPV 5, HPV 6b, HPV 7, HPV 8, HPV 9, HPV 10, HPV 11a, HPV 12, HPV 13 and HPV 18.

CLAIM 89

A diagnostic kit for detecting the presence of antibodies directed against native human papillomavirus which comprises:

- (i) a diagnostically effective amount of the recombinant product of claim 79 and
- (ii) a label that provides for detection of binding of said recombinant product, wherein said label is directly or indirectly attached to said recombinant product.

CLAIM 90

The kit of claim 89, wherein the human papillomavirus is selected from the group consisting of HPV 1, HPV 2, HPV 3a, HPV 4, HPV 5, HPV 6b, HPV 7, HPV 8, HPV 9, HPV 10, HPV 11a, HPV 12, HPV 13 and HPV 18.